

What is Claimed:

1. A method of forming a supported peroxide composition comprising:
forming a mixture comprising an organic peroxide and a C₄ to C₃₀ carboxylic acid;
forming an aqueous solution comprising a compound that is capable of reacting with the C₄ to C₃₀ carboxylic acid to form a water soluble soap;
dispersing the mixture in the aqueous solution to form an emulsion; and
adding to the emulsion a polyvalent metal compound that is capable of reacting with the water soluble soap to form a water insoluble metallic soap, the metallic soap forming a precipitate that further comprises the organic peroxide.
2. The method according to claim 1 wherein the mixture comprising an organic peroxide and a C₄ to C₃₀ carboxylic acid is heated to a temperature above the melting point of the organic peroxide.
3. The method according to claim 2 wherein the aqueous solution or dispersion is also heated to a temperature above the melting point of the organic peroxide.
4. The method according to claim 3 wherein the emulsion is cooled to a temperature below the melting point of the organic peroxide before the polyvalent metal compound is added.
5. The method according to claim 1 wherein the aqueous solution or dispersion further comprises a secondary C₄ to C₃₀ carboxylic acid.
6. The method according to claim 1 wherein the organic peroxide is selected from the group consisting of dicumyl peroxide, a, a'-bis(tert-butylperoxy)-diisopropylbenzene, benzoyl peroxide, and combinations of two or more thereof.

7. The method according to claim 1 wherein the C₄ to C₃₀ carboxylic acid is selected from the group consisting of butyric acid, caproic acid, caprylic acid, capric acid, lauric acid, myristic acid, palmitic acid, stearic acid, arachic acid, behenic acid, lignoceric acid, cerotic acid, butenoic acid, methacrylic acid, octenoic acid, caproleic acid, undecylenic acid, myristoleic acid, palmitoleic acid, oleic acid, erucic acid, linoleic acid, linolenic acid, arachodonic acid, docosahexenoic acid, benzoic acid, toluic acid, malonic acid, maleic acid, fumaric acid, succinic acid, adipic acid, phthalic acid, terephthalic acid, isophthalic acid, itaconic acid, and combinations of two or more thereof.

8. The method according to claim 1 wherein the polyvalent metal compound is selected from the group of salts consisting of calcium salts, aluminum salts, magnesium salts, zinc salts, beryllium salts, strontium salts, barium salts, titanium salts, vanadium salts, chromium salts, manganese salts, iron salts, cobalt salts, nickel salts, copper salts, zirconium salts, molybdenum salts, palladium salts, cadmium salts, mercury salts, gallium salts, tin salts, lead salts, and combinations of two or more thereof.

9. The method according to claim 8 wherein the polyvalent metal compound comprises calcium chloride, calcium sulfate, or magnesium sulfate.

10. The method according to claim 1 further comprising recovering and drying the precipitate.

11. The method according to claim 1 wherein the precipitate comprises a core consisting essentially of the organic peroxide having disposed thereon a mottled cladding comprising the metallic soap.

12. The method according to claim 1 wherein the organic peroxide comprises dicumyl peroxide and the metallic soap comprises calcium stearate.